

**SYSTEM AND METHOD FOR ORGANIZING FIELD  
UPGRADABLE WIRELESS COMMUNICATION DEVICE  
SOFTWARE**

5                   **ABSTRACT OF THE INVENTION**

                  A system and method are provided for organizing field  
upgradeable system software in a wireless communications device. The  
method comprises: forming system software code into a first plurality of  
symbol libraries, each library comprising symbols having related  
10   functionality; arranging the first plurality of symbol libraries into a  
second plurality of code sections so that symbol libraries start at the start  
of code sections; creating a second plurality of contiguously addressed  
memory blocks; identifying each memory block with a corresponding code  
section; storing code sections in the identified memory blocks, with the  
15   start of code sections at corresponding start addresses; maintaining a code  
section address table cross-referencing code section identifiers with  
corresponding start addresses; and, executing the wireless device system  
software.

                  Forming system software code into a first plurality of symbol  
20   libraries includes forming a symbol accessor code. Arranging the first  
plurality of symbol libraries into a second plurality of code sections  
includes arranging each symbol to be offset from its respective code  
section start address, and includes arranging the symbol accessor code in  
a first code section. Then, the method further comprises: maintaining a  
25   symbol offset address table cross-referencing symbol identifiers with  
corresponding offset addresses, and corresponding code section identifiers;  
and, storing the symbol accessor code address in a first location in  
memory.